

Association between pet ownership and mental health and well-being of Canadians assessed in a cross-sectional study during the COVID-19 pandemic

Table A1. Adjusted¹ estimated median (95% Bayesian Credible Intervals; BCI) of the effect of pet ownership* on quality of life utility score, overall health score, and loneliness score using cross-sectional data from a survey (April 14 to May 5, 2021).

	Full models ¹ n = 1,500			Dog owners-only* models ¹ n = 1,047			Cat owners-only* models ¹ n = 1,031		
	Estimate	95% BCI	ESS ²	Estimate	95% BCI	ESS ²	Estimate	95% BCI	ESS ²
Quality of life	-0.01	-0.02; 0.01	4,626	0.00	-0.01; 0.02	3,950	-0.01	-0.02; 0.01	5,086
Overall health	-1.2	-2.5; 0.1	4,723	-0.46	-1.90; 1.01	4,677	-1.29	-2.80; 0.24	4,800
Loneliness	-0.10	-0.30; 0.09	5,060	-0.17	-0.41; 0.08	4,008	-0.06	-0.32; 0.20	4,650

* Reference: non-pet owners. ¹ Bayesian gaussian linear regression models including geographical region as a random-effect intercept and the minimal sufficient adjustment set for estimating the total effect of pet ownership (age, gender, highest level of education, ethnicity, annual household income, social support, disability, current mental health change, pet change in the previous year, number of people in the household, and pet attitude score). ² Estimation of the effective sample size (number of independent samples from the posterior distribution that would be expected to yield the same standard error of the posterior mean).

Table A2. Adjusted¹ posterior odds ratio (OR) and 95% Bayesian Credible Intervals (BCI) of the effect of pet ownership* on perceived mental health, self-reported stress, and anxiety using cross-sectional data from a survey (April 14 to May 5, 2021).

	Full models ¹ n = 1,500			Dog owners-only* models ¹ n = 1,047			Cat owners-only* models ¹ n = 1,031		
	OR	95% BCI	ESS ²	OR	95% BCI	ESS ²	OR	95% BCI	ESS ²
Perceived mental health	0.97	0.85; 1.11	4,611	0.87	0.73; 1.03	4,193	1.01	0.85; 1.20	4,446
Self-reported stress	1.08	0.96; 1.23	4,554	1.01	0.85; 1.19	4,732	1.09	0.93; 1.30	4,177
Anxiety	1.12	0.96; 0.30	4,708	1.08	0.90; 1.30	4,323	1.30	1.07; 1.55	4,691

* Reference: non-pet owners. ¹ Bayesian gaussian linear regression models including geographical region as a random-effect intercept and the minimal sufficient adjustment set for estimating the total effect of pet ownership (age, gender, highest level of education, ethnicity, annual household income, social support, disability, current mental health change, pet change in the previous year, number of people in the household, and pet attitude score). ² Estimation of the effective sample size (number of independent samples from the posterior distribution that would be expected to yield the same standard error of the posterior mean).